AMENDMENTS TO THE CLAIMS

1. (**Currently Amended**) A biocompatible laminate fabric comprising:

a porous first membrane layer;

a porous second membrane layer; and

an open mesh bonding layer between the first and second membrane layers;

wherein the bonding layer holds the first and second membrane layers together by extending into one or more pores of each membrane layer[[.]]; and

wherein open surface areas of the first and second membrane layers are configured to permit tissue ingrowth through the first and second membrane layers and across a surface of at least one of the first and second membrane layers.

2. (Original) The biocompatible laminate fabric of Claim 1, wherein an element of a support structure is disposed between the first and second membrane layers.

3. (Original) The biocompatible laminate fabric of Claim 1, wherein the biocompatible laminate fabric retains sufficient porosity to facilitate cellular ingrowth.

4. (Original) The biocompatible laminate fabric of Claim 1, wherein the biocompatible laminate fabric retains sufficient porosity to facilitate cellular attachment.

5. (Original) The biocompatible laminate fabric of Claim 1, having an average thickness within the range of about 0.001 inches to about 0.010 inches.

6. (Original) The biocompatible laminate fabric of Claim 1, having an average thickness of less than about 0.005 inches.

7. (Original) The biocompatible laminate fabric of Claim 1, having an average thickness of less than about 0.003 inches.

8. (Original) The biocompatible laminate fabric of Claim 1, having an average thickness of less than about 0.002 inches.

9. (Original) The biocompatible laminate fabric of Claim 1, having an average thickness of about 0.0015 inches.

10. (Original) The biocompatible laminate fabric of Claim 1, wherein the biocompatible laminate fabric is no more than about three times as thick as the first membrane layer.

11. (Original) The biocompatible laminate fabric of Claim 1, wherein the biocompatible laminate fabric is no more than about twice as thick as the first membrane layer.

12. (Original) The biocompatible laminate fabric of Claim 1, wherein the biocompatible laminate fabric is no more than about three times as thick as the second membrane layer.

13. (Original) The biocompatible laminate fabric of Claim 1, wherein the biocompatible laminate fabric is no more than about twice as thick as the second membrane layer.

14. (Original) The biocompatible laminate fabric of Claim 1, wherein the bonding layer has an average thickness before bonding to the first membrane layer within the range of about 0.0005 inches to about 0.005 inches.

15. (Original) The biocompatible laminate fabric of Claim 1, wherein the bonding layer has an average thickness within the range of about 0.0008 inches to about 0.004 inches.

16. (Original) The biocompatible laminate fabric of Claim 1, wherein the bonding layer has an average thickness within the range of about 0.0009 inches to about 0.003 inches.

17. (Original) The biocompatible laminate fabric of Claim 1, wherein the bonding layer has an average thickness within the range of about 0.001 inches to about 0.002 inches.

18. (Original) The biocompatible laminate fabric of Claim 1, wherein the bonding layer has an average pore cross section within the range of about 0.005 inches to about 0.200 inches.

19. (Original) The biocompatible laminate fabric of Claim 1, wherein the bonding layer has an average pore cross section within the range of about 0.020 inches to about 0.080 inches.

20. (Original) The biocompatible laminate fabric of Claim 1, wherein the bonding layer has an average spacing between adjacent pores within the range of about .0005 inches to about 0.400 inches.

21. (Original) The biocompatible laminate fabric of Claim 1, wherein the bonding layer has an average open surface area within the range of about 10% to about 90%.

22. (Original) The biocompatible laminate fabric of Claim 1, wherein the bonding layer has an average open surface area within the range of about 30% to about 60%.

23. (Original) The biocompatible laminate fabric of Claim 1, wherein the softening point of the bonding layer is within the range of about 100°F to about 300°F.

24. (Original) The biocompatible laminate fabric of Claim 1, wherein the softening point of the bonding layer is within the range of about 200°F to about 400°F.

25. (Original) The biocompatible laminate fabric of Claim 1, wherein the melting point of the bonding layer is within the range of about 100°F to about 300°F.

26. (Original) The biocompatible laminate fabric of Claim 1, wherein the first membrane layer has an average thickness within the range of about 0.0005 inches to about 0.010 inches.

27. (Original) The biocompatible laminate fabric of Claim 1, wherein the first membrane layer has an average thickness within the range of about 0.001 inches to about 0.002 inches.

28. (Original) The biocompatible laminate fabric of Claim 1, wherein the first membrane layer has an average open surface area within the range of about 10% to about 80%.

29. (Original) The biocompatible laminate fabric of Claim 1, wherein the first membrane layer has an average open surface area within the range of about 30% to about 60%.

30. (Original) The biocompatible laminate fabric of Claim 1, wherein the softening point of the first membrane layer is within the range of about 150°F to about 500°F.

31. (Original) The biocompatible laminate fabric of Claim 1, wherein the softening point of the first membrane layer is within the range of about 200°F to about 400°F.

32. (Original) The biocompatible laminate fabric of Claim 1, wherein the melting point of the first membrane layer is within the range of about 150°F to about 500°F.

33. (Original) The biocompatible laminate fabric of Claim 1, wherein the melting point of the first membrane layer is within the range of about 200°F to about 400°F.

34. (Original) The biocompatible laminate fabric of Claim 1, wherein the difference between the softening point of at least one of the first and second membrane layers and the softening point of the bonding layer is within the range of about 25°F to about 200°F.

35. (Original) The biocompatible laminate fabric of Claim 1, wherein the difference between the softening point of at least one of the first and second membrane layers and the softening point of the bonding layer is within the range of about 50°F to about 100°F.

36. (**Currently Amended**) An implantable medical device comprising a biocompatible laminate fabric and a support structure, wherein the biocompatible laminate fabric comprises:

a porous first membrane layer[[,]];

a porous second membrane layer[[,]]; and

an open mesh bonding layer between the first and second membrane layers[[,]];

wherein the bonding layer holds the first and second membrane layers together by extending into one or more pores of each membrane layer[[.]]; and

wherein open surface areas of the first and second membrane layers are configured to permit tissue ingrowth through the first and second membrane layers and across a surface of at least one of the first and second membrane layers.

37. (Original) The implantable medical device of Claim 36, wherein an element of the support structure is disposed between the first and second membrane layers.

38. (Original) The implantable medical device of Claim 36, wherein the biocompatible laminate fabric retains sufficient porosity to facilitate cellular ingrowth.

39. (Original) The implantable medical device of Claim 36, wherein the biocompatible laminate fabric retains sufficient porosity to facilitate cellular attachment.

40. (Original) The implantable medical device of Claim 36, wherein the biocompatible laminate fabric has an average thickness within the range of about 0.001 inches to about 0.010 inches.

41. (Original) The implantable medical device of Claim 36, wherein the biocompatible laminate fabric has an average thickness less than about 0.003 inches.

42. (Withdrawn) The implantable medical device of Claim 36, wherein the implantable medical device is a left atrial appendage implant.

43. (Cancelled).

44. (Cancelled).

45. (Cancelled).

46. (Cancelled).

47. (Cancelled).

48. (Cancelled).

49. (Cancelled).

50. (Cancelled).

51. (Cancelled).

52. (Cancelled).

53. (Cancelled).

54. (**Currently Amended**) A composite membrane suitable for use as a medical device lamination, comprising:

a first membrane, having first membrane pores;

a second membrane, having second membrane pores; and

a mesh bonding layer, having a bonding layer open surface area and bonding layer pores, wherein the bonding layer at least partially extends into membrane pores of the first membrane and second membrane to form a composite membrane, [[and]] wherein the composite membrane has a composite membrane open surface area in the range between about 10% and about 50%, and wherein the composite membrane open surface area is configured to permit tissue ingrowth through the first and second membrane layers and across a surface of at least one of the first and second membrane layers.

55. (Original) The composite membrane of Claim 54, wherein the first membrane comprises ePTFE.

56. (Original) The composite membrane of Claim 54, wherein the first membrane comprises a thickness in the range of from about 0.0005 inches to about 0.10 inches.

57. (Original) The composite membrane of Claim 54, wherein the first membrane pores comprise an average pore diameter in the range of from about 1 μm to about 200 μm.

58. (Original) The composite membrane of Claim 54, wherein the first membrane comprises an internodal distance in the range of from about 10 μm to about 100 μm.

59. (Original) The composite membrane of Claim 54, wherein the bonding layer comprises polyethylene.

60. (Original) The composite membrane of Claim 54 further comprising a thickness, wherein the thickness is in the range of from about 0.001 inches to about 0.010 inches.

61. (**Currently Amended**) A laminated medical device, suitable for implantation within a medical patient, comprising:

a frame;

a first membrane, having first membrane pores;

a second membrane, having second membrane pores; and

a mesh bonding layer, having a bonding layer open surface area and bonding layer pores, wherein the bonding layer at least partially extends into membrane pores of the first membrane and second membrane[[ ]] to form a composite membrane, [[and]] wherein the composite membrane has a composite membrane open surface area in the range between about 10% and about 50%, and wherein the composite membrane open surface area is configured to permit tissue ingrowth through the first and second membrane layers and across a surface of at least one of the first and second membrane layers.

62. (Withdrawn) The laminated medical device of Claim 61, wherein the frame is configured for use as an atrial appendage occlusion device.

63. (Original) The laminated medical device of Claim 61, wherein the frame is configured for use as a stent.

64. (Withdrawn) The laminated medical device of Claim 61, wherein the frame is configured for use as a septal defect closure device.

65. (Withdrawn) The laminated medical device of Claim 61, wherein the frame is configured for use as an embolic protection device.

66. (Withdrawn) The laminated medical device of Claim 61, wherein the frame comprises a proximal hub, a distal hub, and struts spanning therebetween.

67. (Withdrawn) The laminated medical device of Claim 66, wherein the struts are formed by cutting slots out of a tube.

68. (Original) The laminated medical device of Claim 61, wherein the frame comprises a stent.

69. (Cancelled).

70. (Cancelled).

71. (Cancelled).

72. (Cancelled).

73. (Cancelled).

74. (**Currently Amended**) A stent, suitable for implantation within a medical patient, comprising:

a frame configured for use as a stent;

a first membrane, having first membrane pores;

a second membrane, having second membrane pores; and

a mesh bonding layer, having a bonding layer open surface area and bonding layer pores, wherein the bonding layer at least partially extends into membrane pores of the first membrane and second membrane to form a composite membrane, and wherein the stent has a first end and a second end and an elongate [[is]] generally cylindrical body extending therebetween, wherein the first end diameter is smaller then the cylindrical body length, and wherein the stent [[and]] is adjustable from a first configuration having a reduced diameter to a second configuration having an expanded diameter, the stent forming a conduit in the second configuration.

75. (Cancelled).

76. (Cancelled).

77. (Cancelled).

78. (Cancelled).

79. (Cancelled).

80. (Cancelled).

81. (**New**) The stent of Claim 74, wherein the composite membrane open surface area is configured to permit tissue ingrowth through the first and second membrane layers and across a surface of at least one of the first and second membrane layers.